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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,620	02/19/2004	Jacobus C. Haartsen	0110-001	3162

7590 07/16/2008

Potomac Patent Group PLLC
Attn: Kenneth B. Leffler
P.O. Box 855
McLean, VA 22101-0855

EXAMINER	
TAYLOR, BARRY W	

ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
07/16/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of Allowability	Application No.	Applicant(s)	
	10/780,620	HAARTSEN, JACOBUS C.	
	Examiner	Art Unit	
	Barry W. Taylor	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *6/2/08*.

2. ☒ The allowed claim(s) is/are *1-47*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

EXAMINER'S AMENDMENT AND REASON FOR ALLOWANCE

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kenneth B. Leffler on 07/09/2008. The application has been amended as follows:

EXAMINER'S AMENDMENT

2. **Amendment to the specification**.

Please replace the paragraph on page 1, lines 7-12 with the following amended paragraph:

This application is related to U.S. Provisional Application No. 60/509,538, filed October 9, 2003 in the name of Johan Nilsson and entitled "Adaptive Threshold for HS-SCCH Part 1 Decoding"; and to U.S. Patent Application No. ~~_____~~ No. 10/780,633 (Attorney Docket Number 040072-273) filed on even date herewith in the name of Johan Nilsson and entitled "Adaptive Threshold for HS-SCCH Part 1 Decoding."

3. **Amendment to the specification** on page 10, line 17, insert "or" before the term "optical" and delete "or carrier wave (such as radio frequency, audio frequency or optical frequency carrier waves)".

The paragraph on page 10, lines 9-25 should read as follow:

The various aspects of the invention will now be described in greater detail in connection with a number of exemplary embodiments. To facilitate an understanding of the invention, many aspects of the invention are described in terms of sequences of actions to be performed by elements of a computer system. It will be recognized that in each of the embodiments, the various actions could be performed by specialized circuits (e.g., discrete logic gates interconnected to perform a specialized function), by program instructions being executed by one or more processors, or by a combination of both. Moreover, the invention can additionally be considered to be embodied entirely within any form of computer readable carrier, such as solid-state memory, magnetic disk, or optical disk ~~or carrier wave (such as radio frequency, audio frequency or optical frequency carrier waves)~~ containing an appropriate set of computer instructions that would cause a processor to carry out the techniques described herein. Thus, the various aspects of the invention may be embodied in many different forms, and all such forms are contemplated to be within the scope of the invention. For each of the various aspects of the invention, any such form of embodiments may be referred to herein as "logic configured to" perform a described action, or alternatively as "logic that" performs a described action.

4. **Amendment to claim 47**.

Claim 47, line 1. Delete "machine readable storage medium" and substitute "computer readable carrier" therefor.

Allowable Subject Matter

5. Claims 1-47 are allowed.

6. The following is an examiner's statement of reasons for allowance.

Prior art of record fails to teach or fairly suggest a method of determining whether to indicate reception of an access code in a receiver operating in a communications system, comprising: receiving a signal; generating a correlation value by correlating the received signal with a reference code; setting a threshold level to a first value if the receiver is in a scan mode; setting the threshold level to

a second value if the receiver is in a traffic mode, wherein the second value corresponds to a lower degree of correlation than the first value; comparing the correlation value with the threshold level; and indicating reception of the access code only if the correlation value compares favorably with the threshold level as recited in independent claim 1 and shown in figure 8.

Prior art of record fails to teach or fairly suggest an apparatus for determining whether to indicate reception of an access code in a receiver operating in a communications system, comprising: logic that receives a signal; logic that generates a correlation value by correlating the received signal with a reference code; logic that sets a threshold level to a first value if the receiver is in a scan mode; logic that sets the threshold level to a second value if the receiver is in a traffic mode, wherein the second value corresponds to a lower degree of correlation than the first value; logic that compares the correlation value with the threshold level; and logic that indicates reception of the access code only if the correlation value compares favorably with the threshold level as recited in independent claim 24 and shown in figure 8.

Prior art of record fails to teach or fairly suggest a computer readable carrier having stored thereon one or more instructions for causing a processor to determine whether to indicate reception of an access code in a receiver operating in a communications system, wherein the one or more instructions cause the processor to perform: receiving a signal; generating a correlation value

by correlating the received signal with a reference code; setting a threshold level to a first value if the receiver is in a scan mode; setting the threshold level to a second value if the receiver is in a traffic mode, wherein the second value corresponds to a lower degree of correlation than the first value; comparing the correlation value with the threshold level; and indicating reception of the access code only if the correlation value compares favorably with the threshold level as recited in independent claim 47 and shown in figure 8. The Examiner notes that "a computer readable carrier" is interpreted to be strictly limited to a physical tangible storage medium such as solid-state memory, magnetic disk, or optical disk as defined in specification page 10, lines 9-25.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. The following attachment is a copy of a proposed amendment to the specification and claim 47 proposed by the attorney of record received via FAX on 07/09/2008 and used by the Examiner for the Examiners Amendment listed above.

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To:	Examiner Barry Taylor	From:	Kenneth B. Leffler, Reg. No. 36,075
Fax:	571-273-7500	Date:	July 8, 2008
Phone:		Pages:	12 (including cover page)
Re:	Proposals	CC:	
Your Ref:	10/780,620	Our Ref:	0110-001

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

•Comments:

Dear Examiner Taylor,

Attached are the proposals that you requested. Please do not hesitate to call me at 703.718.8884 if you have any questions or further considerations.

Best regards,

Ken Leffler

Patent
Attorney Docket No. 01104-001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	)	
	)	
Jacobus C. HAARTSEN	)	Group Art Unit: 2617
	)	
Application No.: 10/780,620	)	Examiner: TAYLOR, Barry W
	)	
Filed: February 19, 2004	)	Confirmation No.: 3162
	)	
For: ADAPTIVE CORRELATION OF ACCESS CODES IN A PACKET-BASED COMMUNICATION SYSTEM	)	

PROPOSED AMENDMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Examiner Taylor:

Further to our telephone conversation earlier today, please consider the following proposals and remarks:

Proposed Amendments to the Specification begin on page 2 of this paper.

Proposed Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 10 of this paper.

Proposed Amendments to the Specification:

It is proposed to replace the paragraph on page 1, lines 7-12 with the following amended paragraph:

This application is related to U.S. Provisional Application No. 60/509,530, filed October 9, 2003 in the name of Johan Nilsson and entitled "Adaptive Threshold for HS-SCCH Part 1 Decoding"; and to U.S. Patent Application No. No. 10/780,633 (Attorney Docket Number 040072-273) filed on even date herewith in the name of Johan Nilsson and entitled "Adaptive Threshold for HS-SCCH Part 1 Decoding."

It is Proposed to replace the paragraph on page 10, lines 9-25 with the following amended paragraph:

The various aspects of the invention will now be described in greater detail in connection with a number of exemplary embodiments. To facilitate an understanding of the invention, many aspects of the invention are described in terms of sequences of actions to be performed by elements of a computer system. It will be recognized that in each of the embodiments, the various actions could be performed by specialized circuits (e.g., discrete logic gates interconnected to perform a specialized function), by program instructions being executed by one or more processors, or by a combination of both. Moreover, the invention can additionally be considered to be embodied entirely within any form of computer readable carrier, such as solid-state memory, magnetic disk, or optical disk ~~or carrier wave (such as radio frequency, audio frequency or optical frequency carrier waves)~~ containing an appropriate set of computer instructions that would cause a processor to carry out the techniques described herein. Thus, the various aspects of the invention may be embodied in many different forms, and all such forms are contemplated to be within the scope of the invention. For each of the various aspects of the invention, any such form of embodiments may be referred to herein as "logic configured to" perform a described action, or alternatively as "logic that" performs a described action.

Proposed Amendments to the Claims:

It is proposed to replace all prior versions, and listings of claims in the application with the following listing of claims.

Listing of claims

Claim 1 (original): A method of determining whether to indicate reception of an access code in a receiver operating in a communications system, comprising:

receiving a signal;

generating a correlation value by correlating the received signal with a reference code;

setting a threshold level to a first value if the receiver is in a scan mode;

setting the threshold level to a second value if the receiver is in a traffic mode, wherein the second value corresponds to a lower degree of correlation than the first value;

comparing the correlation value with the threshold level; and

indicating reception of the access code only if the correlation value compares favorably with the threshold level.

Claim 2 (original): The method of claim 1, wherein:

correlating the received signal with the reference code includes performing multiplication; and

the second value is lower than the first value.

Claim 3 (original): The method of claim 1, wherein:

correlating the received signal with the reference code includes performing one or more Exclusive OR operations; and

the second value is higher than the first value.

Claim 4 (original): The method of claim 1, wherein the correlation value compares favorably with the threshold level if the correlation value is greater than or equal to the threshold level.

Claim 5 (original): The method of claim 1, wherein:

generating a correlation value includes performing one or more Exclusive OR operations; and

the correlation value compares favorably with the threshold level if the correlation value is less than or equal to the threshold level.

Claim 6 (original): The method of claim 1, wherein the access code identifies a channel used for communicating the signal.

Claim 7 (original): The method of claim 6, wherein the access code is at least in part derived from a unique address associated with a transmitting unit.

Claim 8 (original): The method of claim 6, wherein the access code is at least in part derived from a unique address associated with the receiver.

Claim 9 (original): The method of claim 1, wherein:

the reference code is 64 symbols long;

the first value is 32; and

the second value is 48.

Claim 10 (original): The method of claim 1, wherein the second value is dynamically determined as a function of a quality-of-service parameter.

Claim 11 (original): The method of claim 10, wherein the quality-of-service parameter is a current packet error rate.

Claim 12 (original): The method of claim 11, wherein the second value is dynamically determined to be a value that yields a false rejection rate that is substantially 10 times lower than the current packet error rate.

Claim 13 (original): The method of claim 11, wherein the second value is dynamically determined by a function that maintains an inverse relationship between the second value and the current packet error rate.

Claim 14 (original): The method of claim 11, wherein the second value is dynamically determined by a function that maintains a proportional relationship between the second value and the current packet error rate.

Claim 15 (original): The method of claim 10, wherein the quality-of-service parameter is a signal to noise ratio.

Claim 16 (original): The method of claim 10, wherein the quality-of-service parameter is a carrier to interference ratio.

Claim 17 (original): The method of claim 1, wherein the second value is established by setting the second value equal to an initial value, and then repeatedly adjusting the second value until a quality-of-service parameter does not change anymore.

Claim 18 (original): The method of claim 17, wherein the quality-of-service parameter is a current packet error rate.

Claim 19 (original): The method of claim 17, wherein the quality-of-service parameter is a signal to noise ratio.

Claim 20 (original): The method of claim 17, wherein the quality-of-service parameter is a carrier to interference ratio.

Claim 21 (original): The method of claim 1, wherein the second value is established by setting the second value equal to an initial value, and then repeatedly adjusting the second value until a quality-of-service parameter changes.

Claim 22 (original): The method of claim 1, wherein the first value enables the receiver to exhibit an acceptable false alarm rate during scan mode, and the second value enables a receiver to exhibit an acceptable false rejection rate during traffic mode.

Claim 23 (original): The method of claim 22, further comprising:

during traffic mode, preventing a false alarm from corrupting reception of a message by checking a remaining part of the received signal to detect the presence of errors; and

during traffic mode, aborting reception of the received signal if errors are detected.

Claim 24 (original): An apparatus for determining whether to indicate reception of an access code in a receiver operating in a communications system, comprising:

logic that receives a signal;

logic that generates a correlation value by correlating the received signal with a reference code;

logic that sets a threshold level to a first value if the receiver is in a scan mode;

logic that sets the threshold level to a second value if the receiver is in a traffic mode, wherein the second value corresponds to a lower degree of correlation than the first value;

logic that compares the correlation value with the threshold level; and

logic that indicates reception of the access code only if the correlation value compares favorably with the threshold level.

Claim 25 (original): The apparatus of claim 24, wherein:

correlating the received signal with the reference code includes performing multiplication; and

the second value is lower than the first value.

Claim 26 (original): The apparatus of claim 24, wherein:

correlating the received signal with the reference code includes performing one or more Exclusive OR operations; and

the second value is higher than the first value.

Claim 27 (original): The apparatus of claim 24, wherein the correlation value compares favorably with the threshold level if the correlation value is greater than or equal to the threshold level.

Claim 28 (original): The apparatus of claim 24, wherein:

the logic that generates a correlation value includes logic that performs one or more Exclusive OR operations; and

the correlation value compares favorably with the threshold level if the correlation value is less than or equal to the threshold level.

Claim 29 (original): The apparatus of claim 24, wherein the access code identifies a channel used for communicating the signal.

Claim 30 (original): The apparatus of claim 29, wherein the access code is at least in part derived from a unique address associated with a transmitting unit.

Claim 31 (original): The apparatus of claim 29, wherein the access code is at least in part derived from a unique address associated with the receiver.

Claim 32 (original): The apparatus of claim 24, wherein:

the reference code is 64 symbols long;

the first value is 52; and

the second value is 48.

Claim 33 (original): The apparatus of claim 24, further comprising logic that dynamically determines the second value as a function of a quality-of-service parameter.

Claim 34 (original): The apparatus of claim 33, wherein the quality-of-service parameter is a current packet error rate.

Claim 35 (original): The apparatus of claim 34, wherein the second value is dynamically determined to be a value that yields a false rejection rate that is substantially 10 times lower than the current packet error rate.

Claim 36 (original): The apparatus of claim 34, wherein the second value is dynamically determined by a function that maintains an inverse relationship between the second value and the current packet error rate.

Claim 37 (original): The apparatus of claim 34, wherein the second value is dynamically determined by a function that maintains a proportional relationship between the second value and the current packet error rate.

Claim 38 (original): The apparatus of claim 33, wherein the quality-of-service parameter is a signal to noise ratio.

Claim 39 (original): The apparatus of claim 33, wherein the quality-of-service parameter is a carrier to interference ratio.

Claim 40 (original): The apparatus of claim 24, wherein the second value is established by setting the second value equal to an initial value, and then repeatedly adjusting the second value until a quality-of-service parameter does not change anymore.

Claim 41 (original): The apparatus of claim 40, wherein the quality-of-service parameter is a current packet error rate.

Claim 42 (original): The apparatus of claim 40, wherein the quality-of-service parameter is a signal to noise ratio.

Claim 43 (original): The apparatus of claim 40, wherein the quality-of-service parameter is a carrier to interference ratio.

Claim 44 (original): The apparatus of claim 24, wherein the second value is established by setting the second value equal to an initial value, and then repeatedly adjusting the second value until a quality-of-service parameter changes.

Claim 45 (original): The apparatus of claim 24, wherein the first value enables the receiver to exhibit an acceptable false alarm rate during scan mode, and the second value enables a receiver to exhibit an acceptable false rejection rate during traffic mode.

Claim 46 (original): The apparatus of claim 45, further comprising:

logic that prevents a false alarm from corrupting reception of a message during traffic mode by checking a remaining part of the received signal to detect the presence of errors; and

logic that aborts reception of the received signal during traffic mode if errors are detected.

Claim 47 (currently amended): A ~~machine readable storage medium~~ computer readable carrier having stored thereon one or more instructions for causing a processor to determine whether to indicate reception of an access code in a receiver operating in a communications system, wherein the one or more instructions cause the processor to perform:

receiving a signal;

generating a correlation value by correlating the received signal with a reference code;

setting a threshold level to a first value if the receiver is in a scan mode;

setting the threshold level to a second value if the receiver is in a traffic mode, wherein the second value corresponds to a lower degree of correlation than the first value;

comparing the correlation value with the threshold level; and

indicating reception of the access code only if the correlation value compares favorably with the threshold level.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor, telephone number (571) 272-7509, who is available Monday-Thursday, 6:30am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost, can be reached at (571) 272-7023. The central facsimile phone number for this group is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (571) 272-2600, the 2600 Customer Service telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Centralized Delivery Policy: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the central fax number **(571-273-8300).**

/Barry W Taylor/
Primary Examiner, Art Unit 2617